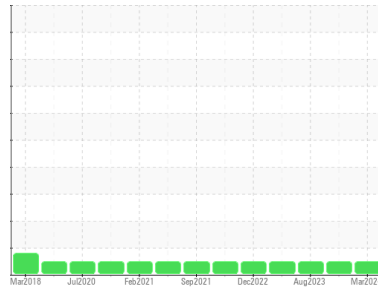




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FRICK 18/E**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI 1009-68 SC (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>USP0007976</b>	USP0004387	USP0000161
Sample Date	Client Info			<b>27 Mar 2024</b>	12 Dec 2023	31 Aug 2023
Machine Age	hrs	Client Info		<b>15408</b>	13995	12460
Oil Age	hrs	Client Info		<b>14095</b>	12680	11145
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<b>0</b>	2	2
Chromium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<b>1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>8	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	6	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	0
Calcium	ppm	ASTM D5185m		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>0</b>	0	<1
Zinc	ppm	ASTM D5185m		<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m	50	<b>40</b>	0	51

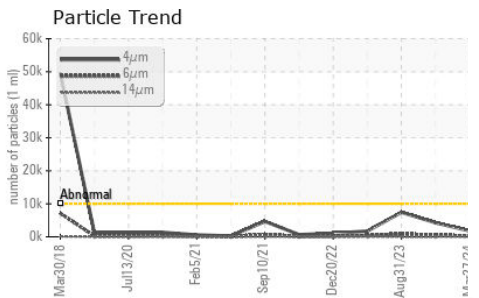
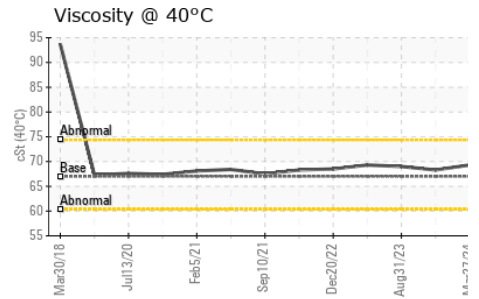
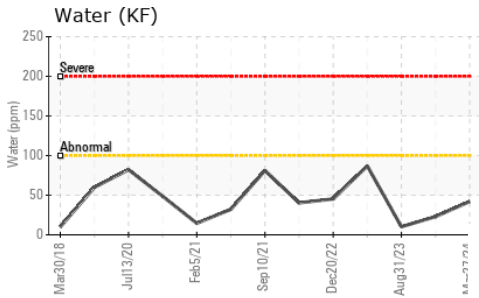
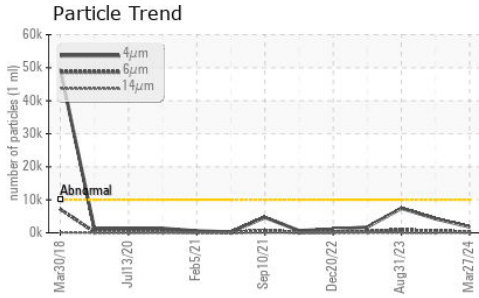
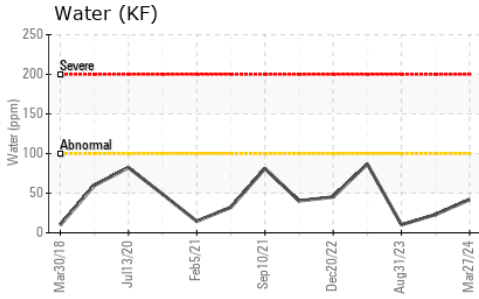
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>0</b>	<1	1
Sodium	ppm	ASTM D5185m		<b>1</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	1
Water	%	ASTM D6304	>0.01	<b>0.004</b>	0.002	0.001
ppm Water	ppm	ASTM D6304	>100	<b>42</b>	23	10.2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>1792</b>	4256	7429
Particles >6µm		ASTM D7647	>2500	<b>235</b>	511	873
Particles >14µm		ASTM D7647	>320	<b>7</b>	9	9
Particles >21µm		ASTM D7647	>80	<b>2</b>	3	1
Particles >38µm		ASTM D7647	>20	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>18/15/10</b>	19/16/10	20/17/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	<b>0.027</b>	0.014	0.014



# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67	69.3	68.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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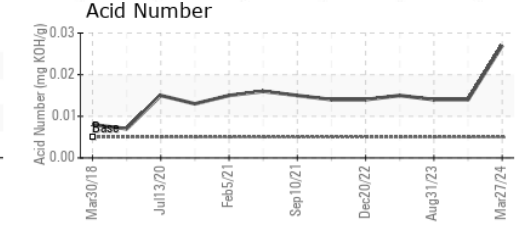
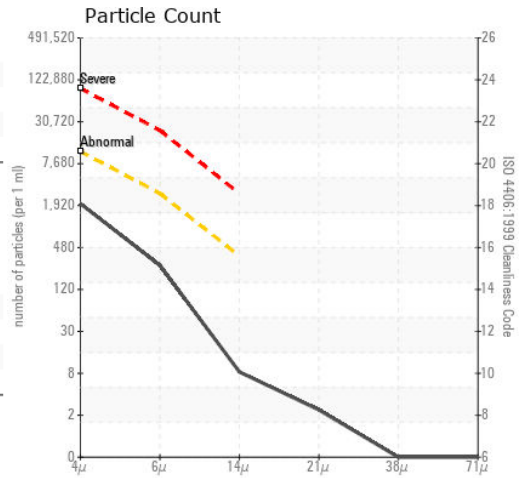
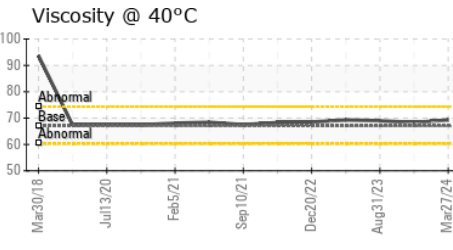
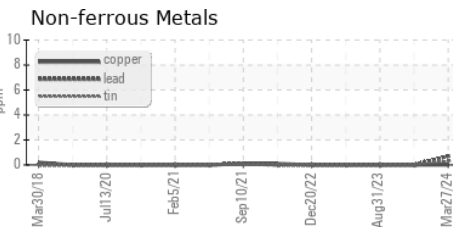
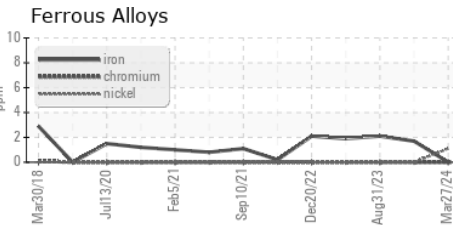
Color



Bottom



## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP0007976  
 Lab Number : 06139304  
 Unique Number : 10964112  
 Test Package : IND 2

Received : 04 Apr 2024  
 Tested : 08 Apr 2024  
 Diagnosed : 08 Apr 2024 - Doug Bogart

**CARGIL INC**  
 3130 GHOLSON RD  
 WACO, TX  
 US 76705  
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:  
F: